



LAWRENCE  
LIVERMORE  
NATIONAL  
LABORATORY

# Thinking Globally about U.S. Extended Deterrence

B. Roberts, D. Santoro, T. Volpe, J. Warden

January 20, 2016

## **Disclaimer**

---

This document was prepared as an account of work sponsored by an agency of the United States government. Neither the United States government nor Lawrence Livermore National Security, LLC, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or Lawrence Livermore National Security, LLC. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or Lawrence Livermore National Security, LLC, and shall not be used for advertising or product endorsement purposes.

This work performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

## **Thinking Globally about U.S. Extended Deterrence**

*A workshop jointly convened November 2, 2015 by  
Center for Global Security Research, Lawrence Livermore National Laboratory  
Nuclear Policy Program, Carnegie Endowment for International Peace  
The Pacific Forum, Center for Strategic and International Studies*

*Hosted at the Center for Strategic and International Studies, Washington, DC*

### **Summary of Key Insights**

Prepared by Brad Roberts, David Santoro, Tristan Volpe, and John Warden

In contrast to the Cold War bilateral global competition between the United States and the Soviet Union, the modern nuclear age features a more complex, multiplayer arena on the regional scale. With the exception of the U.S. and Russia, most major powers retain relatively small nuclear arsenals or technical hedge capabilities. The U.S., with strong interests and security partnerships in Europe, Northeast Asia, and the Middle East, must navigate through long-standing rivalries and active conflicts while attempting to divine the intentions of less experienced nuclear decision makers in charge of weak domestic institutions. As a result, analysts and policymakers must think globally about U.S. extended deterrence. How have the requirements of extended deterrence and assurance changed? Are there important threads that connect each region? What should the U.S. do differently?

To explore these questions, Lawrence Livermore National Laboratory's Center for Global Security Research, in partnership with the Carnegie Endowment for International Peace and the Pacific Forum CSIS, held a workshop on "Thinking Globally about U.S. Extended Deterrence" in Washington, DC on November 2, 2015. The workshop brought together approximately 40 U.S. and foreign deterrence specialists and government officials, all attending in their private capacities. The participants joined a day of not-for-attribution discussions on the changing deterrence and assurance requirements, the threads that connect the regions, and U.S. strategy to deal with emerging challenges. The following is a summary of key takeaways.

### **Balancing Deterrence and Assurance with Regional Powers**

*The initial session asked participants to assess the leading and emerging threats posed by major regional powers (Tier 1: China and Russia; Tier 2: North Korea and Iran) and then focus on how the United States postures to deter conflict and aggression while maintaining stability. What are the challenges that the U.S. faces in dealing regional powers? How have these changed or are they likely to change in the future? What are the requirements of adversary deterrence? What are the requirements of adversary assurance? To what extent do actions in one region have consequences in others? How so?*

General deterrence, i.e., dissuading adversaries from challenging core U.S. interests in peacetime, may not be as effective as in the past. The U.S. and its allies no longer face a global adversary as they did during the Cold War, but several regional competitors: Russia, China, North Korea, and, to a lesser extent, Iran. These competitors are prepared to run military risks against the established regional orders, which they regard as fundamentally unjust.

Regional competitors may be more risk-acceptant today because they believe the U.S. is in decline and that democracies lack resolve to defend their strategic interests. They also believe that they can succeed militarily because asymmetries of stake and geography are in their favor.

Regional competitors are exploiting these asymmetries by (1) creating facts on the ground; (2) engaging in subtle, below-the-threshold actions to advance their interests, e.g., salami-slicing or creeping-expansionism tactics; (3) developing anti-access and area-denial technologies to prevent responses against their actions; or (4) escalating their way out of a crisis, i.e., escalating to de-escalate.

Adapting deterrence requirements to these problems is complex and varies for each regional competitor. Generally speaking it requires the U.S. and its allies to maintain the ability to manage the risks of escalation, particularly the ability to engage in limited military engagement or war. Research to explore the best ways to do so has started, but the topic remains understudied.

A related issue includes the need for the U.S. and its allies to find ways to communicate assurances of U.S. restraint to regional competitors. *General assurance* occurs in peacetime and can take the form of showing that objectives are limited, accepting some degree of vulnerability, or showing that the U.S. is willing to accommodate the interests of others. However, providing these assurances is not always in the U.S. interest. Is it possible for Washington to assure Beijing and Moscow? If so, what can it expect in return?

An even more difficult problem is that of providing *specific assurance* to adversaries during crises or conflicts. Effective deterrence, after all, is not possible without effective assurance of restraint ("If you don't do this, I won't do X"). Specific assurance begins with public declarations of limited war aims—not pursuing regime change, for example—and must also be signaled through actions. The U.S. can attempt to show its intentions are limited by demonstrating restraint, such as not targeting leadership, strategic command and control, or nuclear forces. But when, if ever, would the U.S. want to provide these assurances to countries like Iran and North Korea? Would the peacetime signaling required to make wartime assurances credible while controlling escalation cause adversaries to think they can take more risk?

### **Comparing U.S.-Led Regional Security Architectures**

*The second session asked participants to compare the key features of U.S. alliance systems in Europe (NATO and non-NATO), East Asia (Japan, South Korea, and Taiwan), and the Middle East (Israel, Saudi Arabia, and the GCC). How does the U.S. use political, economic, diplomatic, and military means to assure allies? What is the role and nature of U.S. extended deterrence in each region? To what extent has U.S. efforts to assure allies undermined its attempts to assure adversaries? Can success or failure of U.S. assurance efforts be measured? Has the effectively balanced its desire to assure allies with its need to restrain and control them? How do actions in one region spill over to others?*

If deterrence of regional competitors is evolving, so, too, are the requirements for assuring U.S. allies. Some analysts recently predicted a world in which U.S. allies field independent

nuclear arsenals because they doubt the credibility of the U.S.'s nuclear umbrella. On the contrary, evidence reviewed by participants at the workshop suggests a high and growing number of requests from allies in Europe, Northeast Asia, and the Middle East for strategic nuclear reassurances by the US.

Until recently, the strongest requests for U.S. assurances came from Northeast Asia, specifically Japan and the Republic of Korea. However, on the aftermath of the Ukrainian crisis and the nuclear agreement with Iran, requests for U.S. assurances from European and Middle Eastern allies have increased considerably. Common requests from all three regions include military hardware, intelligence support, and security training exercises to visibly shore up indigenous defense capabilities.

Allies in one region closely (and sometimes anxiously) watch developments in alliance arrangements in others. Fears of abandonment have been magnified by the recent hesitations of the White House in Syria, Libya, and even Ukraine, as well as a pervasive fear among Arab partners that the U.S. will accommodate Iranian ambitions in the Middle East. Formal alliance assurances from the U.S. to defend a treaty ally (which Ukraine is not, for example) may be satisfactory in some allied countries, but they cannot remove all doubts.

As a general rule, however, allies voice confidence in the overall strength of their partnership with the U.S. Participants noted that allies are never entirely satisfied. They want the U.S. to strike a balance between maintaining its global credibility for action without getting bogged down in local conflicts.

The changed and changing security environment has created new assurance requirements. Allies are confident that the U.S. would fulfill its commitments in the case of high-end contingencies, especially nuclear ones. However, they worry about the U.S. role in addressing low-level aggression. Should the U.S. promptly respond to every provocation from North Korea or Iran? Or is the role of U.S. extended deterrence to cast a protective strategic shadow over allies so they can proactively shape adversarial behavior and deal with asymmetric challenges? Work to address these concerns has started inside and outside government. It includes strong coupling and communication between the U.S. and its allies and stresses the importance of forward-deployed forces and good overall alliance health. More research in this area is needed.

Assurance is a two-way street. The U.S. wants, and needs, assurance from its allies to take on an appropriate amount of the deterrence and defense burden and, more important, have confidence that allies will stay united and coordinate action with Washington in a crisis. More generally, the U.S. wants assurance that allies will show appropriate restraint vis-à-vis a regional competitor, both in peacetime and in a conflict. Assessing how specific allies can provide assurance to the U.S. is an area for future research.

### **Designing Regional Strategies to Mitigate Trilemmas**

*The third session addressed a particular challenge, security trilemmas, where U.S. actions to deter one potential adversary complicate its relationship with another. The U.S. efforts to strengthen deterrence of North Korea by expanding its missile defense architecture, for example, cause consternation in Beijing. What are the security trilemmas that the U.S. should be*

*concerned about? How, if at all, can the U.S. mitigate these security trilemmas? What role should allies play? Are security trilemmas likely to extend across regions? How so?*

New concepts are emerging to explain the complexity of today's multiplayer deterrence relationships. One concept is *security trilemma*, wherein an action by one state to increase its security against a competitor causes a third state to feel insecure. For example, this concept can help explain Russian and Chinese reactions to U.S. missile defenses directed at Iran and North Korea or the deterrence dynamics at play between China, India, and Pakistan.

Analysts disagree about the definition and utility of the trilemma concept. Some analysts suggest that it is more accurate to talk about *dual dilemmas*, whereby action by one state to increase its security against a competitor drives that competitor to forge a de facto alliance with another state. The dual dilemma concept could explain the close relationship between Russia and Iran and between China and North Korea against the U.S. and the close relationship between China and Pakistan against India.

### **U.S. Strategy toward Provocations, Brinksmanship, and Low-Level Conflict**

*The final session examined how U.S. regional approaches to security hold up against limited, low-level challenges, including proxy conflicts in the Middle East, hybrid war in Eastern Europe, and brinksmanship and provocation in Northeast Asia. What costs and benefits have regional powers incurred through strategies that use provocation and subconventional conflict to achieve their aims? How do provocations and limited conflicts impact the credibility of U.S. security guarantees and assurances? What are realistic goals for the U.S. as it attempts to counter these strategies?*

When thinking about limited, low-level challenges in the so-called 'grey zone' before standard conventional conflict, the U.S. faces the challenge of a more systematic approach to escalation management across the entire spectrum of conflict. Analysts must be careful to distinguish between an adversary's low-level provocations and traditional conventional military operations. Is it possible to contract or expand bands of the grey zone? Are provocations designed to accomplish something short of a military response or to induce one?

The U.S. must constantly balance between deterring low-level provocations and preventing unwanted escalation. Giving allies more freedom to respond forcefully to grey-zone provocations may improve deterrence, but would also increase the risk that a local provocation turns into a general war. More robust allied defense capabilities can contribute to both goals: adversaries have more to fear while allies defend themselves without drawing in the U.S.

The nature of salami slicing makes it difficult for the U.S. to respond. Local provocations (e.g., fomenting a revolution, creating an attack on Russians (minority populations?) in a country, etc.) are tailored to create ambiguity and fall below the threshold of conflict. However, a markedly strengthened declaratory policy, may go against U.S. interest by putting U.S. credibility on the line and potentially dragging the U.S. into an escalating conflict.

Participants also focused on several different ways to manage escalation risks. Escalation-management is an underlying current running through work by U.S. defense policy planners

and the wider non-governmental analytic community to develop a strategy of political-military success during a conflict – what many refer to as a ‘blue theory of victory.’ How can the U.S. get its adversaries to choose de-escalation? What exactly do we mean by de-escalation? De-escalation could be defined as an end, but might also be the unexpected result of an action. One side can initiate, but de-escalation requires cooperation from the opposing party; it cannot be accomplished through force alone.

### **Summary Questions:**

The workshop agenda was designed to inform our thinking about four key questions:

1. How have the requirements of extended deterrence changed in the decades since the end of the Cold War?
2. How have the requirements of assurance changed?
3. Are there threads that connect the regions?
4. What should the United States do differently?

A few summary insights follow below.

#### *How have the requirements changed?*

In his cautionary note about extended deterrence in the 1960s, British Defense Minister Dennis Healey famously argued that deterrence of Soviet aggression in Europe required only 5 percent confidence in the U.S. guarantee, given the great consequences of war (whereas, he argued, the assurance of allies required 95 percent confidence that deterrence would enable them to escape the costs of war). In today’s world, we must wonder how much deterrence value there would be in a deterrent with only a 5 percent confidence. As this discussion has highlighted, we have many reasons to worry that deterrence may not be fully effective in today’s environment. To varying degrees, the leaders of Russia, China, and North Korea are men willing to run some military risk to re-make regional orders they consider unjust and dangerous and to push back on what they perceive to be encirclement and containment by the United States and its allies. To varying degrees, they articulate asymmetries of stake that may lead them to calculate that they can prevail in a battle of wills (and nuclear brinksmanship) with the U.S. and its allies. They also seem motivated by the views that the United States is a declining power and that democracies lack the resolve to defend their interests. In short, the requirements of extended deterrence have risen sharply over the last two decades. We must find ways to strip away the confidence these leaders appear to have in their ability to manage the risks of escalation with the United States.

#### *How have the requirements of assurance changed?*

In light of the foregoing, it is no surprise that when it comes to the assurance of U.S. allies, the requirements are high and rising. Of course this is not true for all U.S. allies, many of which feels as secure as ever. But a significant number of U.S. allies do not feel so secure—indeed, they are explicitly targets. Kim Jong Un repeatedly warns Japan that it is “in our nuclear cross hairs” and would be the first target of North Korean nuclear attack. Vladimir Putin has issued nuclear threats to NATO members with stunning frequency over the last two years. Xi Jinping

has talked more softly but is building a bigger nuclear stick. Thus in Europe, Northeast Asia, and the Middle East there are rising demands for assurance by the United States.

But assurance shouldn't just flow from the U.S. to its allies. It must flow in reverse as well. The U.S. needs assurance that its allies won't abandon it in a mounting regional confrontation and settle for a political deal that compromises a vital interest. The U.S. also needs assurance that allies will be restrained in conflict and not draw the U.S. into a conflict that it sees as avoidable.

Assurance also belongs in the relationships with adversaries and potential adversaries. They must be assured that their restraint will be met in return by U.S. restraint. The experience of the United States over three presidential administrations in providing assurance to Russia that U.S./NATO BMD will not negate Russia's deterrent is hardly reassuring in this regard. At the end of the day, Russia chose not to be reassured. It rejected cooperation and chose confrontation. We must ask ourselves whether Russia, China, and North Korea are re-assurable in any meaningful sense.

*Are there threads that connect the regions?*

They are numerous. Experts in Northeast Asia watch anxiously the debate in Europe about NATO's nuclear sharing arrangements and worry that the promise of a globally deployable fleet of dual-capable aircraft with non-strategic weapons will not be available to them in some future crisis. Experts in Northeast Asia also watch the West's debate about policy toward Russia, worrying that any sentiment for appeasement would soon be detected by China and embolden it. Allies in all three regions worry about their fate in U.S. defense strategy as the United States prioritizes and reprioritizes to account for a changing security environment and tightening resources. They fear American overextension in another region that would compromise its willingness to bear costs and risks in their region. They worry about U.S. credibility. Experts in and on the Middle East seem, however, to see relatively few lessons from the other regions of direct interest to them, given the absence of any past dialogue there about extended U.S. nuclear deterrence.

The cross regional perspective has also allowed U.S. to explore the differences among the regions. A key proposition has emerged in this discussion: that the challenges of extended deterrence in a collective security organization like NATO are fundamentally different from the challenges in bilateral mechanisms, on the argument that multilateral mechanisms must credibly communicate collective will while bilateral mechanisms need not. This proposition is worthy of further exploration. This proposition seems to downplay the desire of states in bilateral alliance relationships with the U.S. to be able to credibly signal their shared resolve with the U.S. when it is being tested by a regional challenger.

*What should the U.S. do differently?*

This dialogue has been rich in implications for U.S. policymakers and they fall roughly into two bins: what capabilities the U.S. should acquire to enhance the effectiveness of extended deterrence and assurance and what the U.S. should do to begin to re-think problems and approaches. On capabilities, it has been suggested that the U.S. should:



- Stop de-legitimizing nuclear weapons and more aggressively modernize its nuclear posture
- Find a place for cruise missile defense in the phased adaptive approaches to regional missile defense
- Build more and better ISR and do so in more partnership with allies
- Assemble regional force postures that deny potential adversaries confidence in their ability to achieve a military fait accompli at the conventional level of conflict without bogging down in the process
- Develop a broader set of Flexible Deterrence Operations for so-called Gray Zone conflicts (below the level of hot war)

On re-thinking problems and approaches, the emphasis here has fallen onto the question of limited nuclear war and how to understand “escalation control” in a context today entirely unlike the cold war context in which many of the prevailing concepts took shape. In limited nuclear wars of the kind we can imagine in the 21<sup>st</sup> century, the dynamics of escalation and de-escalation will be shaped by a competitive testing of resolve with nuclear threats, cross domain actions, and perhaps limited nuclear attacks—all in the context in which our potential adversaries perceive an asymmetry of stake underwriting their actions. This is unlike the Cold War and points to significant risk.

*Lawrence Livermore National Laboratory is operated by Lawrence Livermore National Security, LLC, for the U.S. Department of Energy, National Nuclear Security Administration under Contract DE-AC52-07NA27344.  
LLNL-TR-681012*